

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/614,212	03/12/96	CURRADO	F

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EXAMINER	
PATEL, V	
ART UNIT	PAPER NUMBER
2215	

DATE MAILED: 03/18/97

**Please find below a communication from the EXAMINER in charge of this application.**

Commissioner of Patents

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9-12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Nishida et al.

Nishida discloses a spark plug (figure 2) comprising an outer annular electrode (2) with an annular end face (not labeled), an insulator (3), an inner electrode (not labeled) with a rod-shaped element (not labeled) and a disk-shaped element (1), a gap (not labeled) in the range of 0.02-0.08 inch (see column 3), a 360 degree spark zone (not labeled), an annular lip (1a) with rectangular cross section.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida et al and Riley.

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Nishida et al discloses a;; the limitation of claim 8 except the claimed triangularly shaped lip cross-section. However, Nishida has disclosed the rectangularly shaped lip section which serves the purpose of the triangularly shaped lip section which is to facilitate the generation of multiple sparks. Thus, triangularly shaped lip section is a design alternative of an artisan. Nonetheless, in the same field of endeavor Riley discloses such a triangularly shape lip (30 of figure 5) on a center electrode (18) for the purpose the applicant proposes.

***Other Prior Art Cited***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Russell discloses a spark plug assembly.

Bushey discloses a spark plug.

Lewis discloses a spark plug.

Hensley et al discloses a method of producing a high energy plasma for igniting fuel.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vip Patel whose telephone number is (703) 305-4846. The examiner can normally be reached on Monday-Thursday from 6:30 AM- 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea, can be reached on (703) 305-4939. The fax phone number for this Group is (703) 308-7382.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4900.

Vip Patel  
March 12, 1997

  
SANDRA L. O'SHEA  
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